ARTICLE APPEARED ON PAGE A-1

WASHINGTON POST
30 September 1985

U.S., Soviet At Odds on 'Star Wars'

Each Side Seeking To Take Lead in Propaganda Battle

By Walter Pincus
Washington Post Staff Writer

Last week, in the latest administration assertion that the Soviet Union is far ahead of the United States in developing "Star Wars" technology to destroy enemy nuclear missiles, White House national security affairs adviser Robert C. McFarlane said Moscow "has the most advanced SDI [Strategic Defense Initiative] program on the face of the Earth."

Not only does that contradict Soviet assertions of a U.S. edge in SDI research, it is at odds with a variety of Defense Department and U.S. intelligence assessments of which superpower has a leg up in space weaponry.

NEWS ANALYSIS

If a future battle between the superpowers for military domination of space ever mirrors the current rhetorical duel on Earth, the heavens will be a very confusing place. As part of an intensifying effort to seize the high ground in the propaganda war over arms control, each side is eager to portray the other as the bogeyman when it comes to controversial strategic defenses.

Just as the Reagan administration sometimes seems given to hyperbole in describing the Soviet Star Wars program, Moscow is guilty of understatement in denying that it even has thoughts of strategic defenses. As recently as Friday, Soviet Foreign Ministry spokesman Vladimir Lomeiko said in Washington that Moscow "does not have any space weapons" and "is not engaged in research on space attack weapons."

In fact, while the Soviets have extensive defenses against some kinds of U.S. strategic weapons threatening the Soviet homeland, there is little evidence that Moscow has surpassed the United States in the sort of computer technology and exotic weapons fundamental to a comprehensive shield against enemy nuclear warheads.

The Soviet strategic defense program is primarily focused on countering U.S. bombers and cruise missiles, weapons sometimes referred to as "air breathers" since they remain in the atmosphere, unlike intercontinental missiles.

U.S. defense experts agree that the bulk of past Soviet strategic defense effort has gone into building thousands of air defense radars, antiaircraft missiles and tens of thousands of jet fighter-interceptors.

Nonetheless, the Air Force thinks that its new B1B bomber and cruise missiles, which hug the terrain and are difficult to detect, will be able to penetrate those defenses for many years to come. Consequently, Soviet hegemony in this area is not considered particularly threatening by most U.S. analysts.

To defend against some U.S. missile warheads, the Soviets also have put great emphasis on building a traditional, ground-based antiballistic missile system around Moscow, much like the one abandoned as obsolete by the United States in 1976.

Yet this Soviet effort is fundamentally dissimilar from the U.S. SDI research program, which is trying to determine the possibility of a comprehensive and futuristic defensive "umbrella" based in space.

In this more sophisticated concept of SDI research—the kind conjured by President Reagan's Star Wars dream—recent testimony to Congress casts doubt that the Soviets have any lead.

Last spring, for example, the Air Force told a House Appropriations subcommittee that despite years of research on lasers and particle beams, which someday may be used to shoot down incoming warheads, the Soviets "have no identifiable lead in the applications of these technologies to a space-based strategic defense."

The undersecretary of defense for research also told Congress in his annual statement this year that the Soviet Union does not surpass the United States in any of the 20 "basic technologies that have the greatest potential for significantly improving military capabilities in the next 10 to 20 years."

Also, Congress' Office of Technology Assessment in a recent study of SDI concluded that "in terms of basic technological capabilities . . . the United States remains ahead of the Soviet Union in key areas required for advanced [ballistic missile defense] systems."

SDI Director Lt. Gen. James A. Abrahamson and John K. Sellers, chief of the Defense Intelligence Agency's strategic defense branch, in congressional testimony also seemed relatively sanguine about U.S. advantages in advanced technology.

The United States, they said, had a "substantial lead" over the Soviets in "the key technology of computers" needed for battle management of an SDI system. They added, however, that the Soviets "have a strong program in optical computers which could have the potential to give them an advantage for some SDI-related tasks."

The Soviets also "have very extensive networks" that would allow production of radars critical for surveillance, targeting and tracking in any future SDI system, the two added. But they pointed out that "both the U.S. and the Soviets lead in some aspects" of radar technology.

THE UNITED STATES

Robert C. McFarlane, national security affairs adviser: Moscow "has the most advanced SDI [Strategic Defense Initiative] program on the face of the Earth."

THE SOVIET UNION

Vladimir Lomeiko, Soviet Foreign Ministry spokesman: Moscow "does not have any space weapons" and "is not engaged in research on space attack weapons."

Continued

Abrahamson described the Soviets as ahead in "land-based lasers and perhaps potentially ahead of us—I don't know for sure—in the area of neutral particle beam technology," which potentially could be used in a future Star Wars defense.

Experts agree that the Soviets have two ground-based lasers at their Saryshagan test range. In the past, those have been used to baffle or blind U.S. satellites as they orbit overhead. But there is no conventional wisdom on how threatening such devices could become.

The Pentagon publication "Soviet Military Power" states that "by the late 1980s, the Soviets could have prototypes for ground-based lasers for ballistic missile defense. Testing of components for a large-scale deployment system could begin in the early 1990s."

If the Soviets "skip some testing steps," the publication adds, a complete ground-based laser system designed to shoot down incoming warheads could be ready for deployment "by the early-to-mid 1990s."

A Central Intelligence Agency report to Congress in June also expressed concern about Soviet efforts to develop such a system but concluded that it "probably" could not come until "after the year 2000."

Sellers, the DIA official, provided an interesting insight into how estimates on such futuristic systems evolve.

"We see starts and stops with certain programs," Sellers told Congress, "but there is no way to estimate [how much money the Soviets have spent] . . . . We see small windows into their program—we happen to have one into that area—but we do not get the full scope of what they are working on . . . . When we say, 'We have evidence that they are working in this area for a space weapon, but no evidence of how many people, how large the effort is.' "

However, when the DIA followed up with a written analysis of the same Soviet program, it was much more assertive, insisting that Moscow had "a vigorous program under way for particle beam development and could have a prototype space-based system ready for testing in the later 1990s."

Other U.S. government statements on Soviet research suggest how tricky prognostication can be. In "Soviet Military Power," for example, the prospect of testing a relatively limited Soviet "spaced-based particle beam weapon intended only to disrupt satellite electronic equipment" was forecast for "the early 1990s."

The CIA, in a June 26 statement to a Senate Appropriations subcommittee, predicted that the "Soviets will eventually attempt to build a space-based [particle beam weapon]" but added that the "technical requirements are so severe that we estimate there is a low probability they will test a prototype before the year 2000."

The bulk of the present Soviet ballistic missile defense effort has been directed at what analysts call the "traditional" ABM (antiballistic missile) approach. This consists of land-based radars that direct land-based launchers capable of firing a missile at an incoming warhead.

The 1972 ABM Treaty permits the United States and Soviet Union each to maintain one ABM site. The United States dismantled its site as obsolete in 1976; the Soviets built a site around Moscow and recently modernized it.

President Reagan and other U.S. officials, in defending Star Wars research, frequently note that the Soviets have the only operating ABM system—the one in Moscow. What they fail to add, critics complain, is that the Moscow ABM complex is vulnerable to attack and much like the system the United States built in 1974 and abandoned two years later.

DIA's Sellers, for example, described Moscow's newest electronic radar building as "huge, excessive in size" because the Soviets still lack the capability to miniaturize computers.

That size makes the Moscow site "one big vulnerable facility," he added. It was precisely such radar vulnerability at the onset of any missile attack that led the United States to drop plans to build a nationwide ABM system in the early 1970s. Instead, the United States pushed for a treaty prohibiting such nationwide systems.

The new Moscow system also has two kinds of nuclear rocket interceptors, similar to the two-layer defense that made up the U.S. Spartan and Sprint ABM missile approach.

Sellers noted the large number of smaller radars the Soviets are putting into operation in the area. He said this raised concern "that these could be intended to support a territorial defense for future ABM deployments," defending not just Moscow against nuclear attack but the surrounding region as well.

"Soviet Military Power" likewise said that the extensive Soviet ABM radar activity "suggests that the U.S.S.R. may be preparing an ABM defense of its national territory."

Abrahamson was asked by a House panel about this potential for a Soviet "breakout," or sudden abrogation, from the ABM limits. He replied that such a system, if undertaken by the Soviets, would be made up of "nuclear and older technology and . . . would only be partially effective against a U.S. first strike."

However, he added, "The real issue is that of the capability against a ragged retaliatory, a second strike by the United States, which I believe is what the Soviets think they have to face."

Asked if the Soviets had the capability to build a computerized, battle-management facility to handle even that threat, Abrahamson responded, "They would have difficulty with their technology today beginning to mount that kind of system. That is why I believe—not because of SDI, but because they realize that fundamental problem in their technology—they have targeted for all their industrial espionage our computer and software industy."